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EXAMINER

NGUYEN BA, HOANG VU A

ART UNIT	PAPER NUMBER
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2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/010,403

Applicant(s)

BOWER ET AL.

Examiner

Hoang-Vu A. Nguyen-Ba

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the amendment filed September 27, 2006.
2. Claims 1-50 are pending. Claims 1, 7, 15, 24, 31, 37, 42, 45, 48, 49 and 50 are independent claims.

Response to Amendments

3. Per Applicants' request, Claims 1, 3, 5, 7, 9, 12, 15, 17, 24, 31, 32, 37, 38, 39, 42, 44, 45, 47 and 48 have been amended; Claims 6, 19, 30, 33, 35, 41, 43 and 46 have been canceled; and new Claims 49 and 50 have been added.

Response to Arguments

4. Applicants' arguments with respect to claims 1, 3, 5, 7, 12, 13, 15, 24, 31, 37, 42, 45 and 48 in the Remarks filed concurrently with the Amendment have been fully considered but are moot in view of the new grounds of rejection.
5. The allowability of Claims 6 and 30, currently rewritten in an independent form (as Claims 49 and 50) is withdrawn in view of the new grounds of rejection.

Drawings

6. The drawings filed on December 7, 2001 are objected to because of the following minor informalities:

In FIG. 2, block (201), the term "Transciever" is mis-typed;

In FIG. 6, block (201), the term "Transciever" is mis-typed.

Appropriate correction is required.

Claim Objection

7. Claim 48 is objected to because of the following minor informalities:

Currently Amended Claim 48: the conjunctive “and” at the end of line 6 (after “means for decoding said digital audiovisual signal;”) should be deleted.

Notice to Applicants

8. **Currently Amended Claim 1:** since it is unclear as to whether the claimed paired analog audio signal input and analog video signal input, video decoder, A/D converter, compressor, network interface and digital data network are physically tied to the frame of an automobile, a broad and reasonable interpretation of amended claim 1 is that these components are merely discrete components that are brought and connected together inside an automobile and that they are not physically tied to the body of the automobile on a permanent basis.

Currently Amended Claim 7: Claim 7 recites at lines 14-15 “said interface being located in an automobile.” It is unclear as to whether: i) the interface is physically tied to the frame of the automobile or is merely located inside an automobile; ii) the claimed optical disc drive and digital data network are also physically tied to the frame of the automobile; iii) the optical disc drive, the digital data network and the interface are physically connected as an integrated system.

For compact prosecution purposes, currently amended Claim 7 is interpreted to mean that Applicants intent to claim three discrete components that are not necessarily connected together and not physically tied to the frame of an automobile both on a permanent basis.

Currently Amended Claim 15: since it is unclear as to whether the

claimed IEEE 1394 port, IEEE 1394 bus, microcontroller and interface are physically tied to the frame of an automobile, a broad and reasonable interpretation of amended a broad and reasonable interpretation of claim 15 is that these components are merely discrete components that are brought and connected together inside an automobile and that they are not physically tied to the body of the automobile on a permanent basis.

Currently Amended Claim 24: Claim 24 recites that the decoding and digitizing, digitizing, combining and compressing and transmitting steps are performed in an automobile. It is unclear as to whether the components that perform these steps are physically tied to the frame of the automobile on a permanent basis.

For compact prosecution purposes, currently amended Claim 24 is interpreted to mean that Applicants intent to claim that these four steps are performed by discrete components that are not necessarily connected together on a permanent basis and not physically tied to the frame of an automobile.

Currently Amended Claim 31: since claim 31 does not recite that the components which perform the claimed steps are those physically tied to the body of an automobile, a broad and reasonable interpretation of this claim is that the components performing the claimed steps can also be physically installed and tied to the body of any vehicle (e.g., an airplane) and that they are not necessarily physically tied together on a permanent basis.

Currently Amended Claim 37: same comments and interpretation as discussed in claim 31.

Currently Amended Claim 42: since it is unclear as to whether the means for decoding and digitizing, for digitizing, for combining and compressing, for remotely controlling are physically tied to the frame of an

automobile on a permanent basis, a broad and reasonable interpretation of Claim 42 is that these means are discrete and removable from the automobile.

Currently Amended Claim 45: same comments and interpretation as discussed in Claim 42.

Currently Amended Claim 48: same comments and interpretation as discussed in Claims 42 and 45.

Claim Rejections – 35 USC §112

9. The following is a quotation of the second paragraph of the 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 2 and 45 are rejected under 35 U.S.C. § 112 , second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Lack of antecedent basis:

Currently Amended Claim 45: the limitation “said digital data network” recited at lines 9-10 (first occurrence) lacks proper antecedent basis.

b. Vague, confusing and indefinite:

Original Claim 2:

Claim 2 recites a “digital data distribution system.”

Support in the specification for this limitation is only found at [0029], line 2 (“The present invention provides a system for interfacing analog audiovisual signal sources with a digital data network that **distributes** the audiovisual programming to a

number of output devices.” Emphasis added). According to the description, it appears that the digital data network that distributes the audiovisual programming is separate from the interface. Therefore, it is confusing and thus indefinite to claim a “digital data distribution system comprising the interface of claim 1” because the specification seems to clearly imply that the “digital data distribution system” (i.e., the digital data network) and the “interface” are separate entities.

For compact prosecution purposes, Claim 2 is interpreted to mean – A built-in automobile digital data system comprising the interface of claim 1 –

Claim Rejections – 35 USC § 103

11. The following is a quotation of the 35 U.S.C. § 103(a) which form the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,973,722 to Wakai et al. (“Wakai”).

Claim 1

Wakai discloses *an interface for connecting an analog audiovisual signal source with a digital data network* (see at least FIG. 1), *said interface comprising:*

at least one paired analog audio signal input and analog video signal input (see at least FIG. 1, "Ext A/V Input" to the "System Interface Unit" 118; 7:2-3);

a compressor for receiving output from said video decoder and said analog-to-digital converter and combining and compressing said digitized video signal and said digitized audio signal into a single audiovisual data stream (see at least 9:44-45; FIGs. 7, items 712, 714); and

a network interface for receiving said single audiovisual data stream from said compressor and transmitting said single audiovisual data stream on said digital data network (see at least FIG. 1, items 118, 116, 138-140).

Wakai does not specifically disclose:

a video decoder connected to said video signal input for decoding and digitizing an incoming video signal ;

an analog-to-digital converter connected to said audio signal input for digitizing an incoming audio signal.

However, the video decoder and digitizer and audio analog-to-digital converter are deemed inherent to Wakai as 4:42-45 and 8:3-8 show that communications between users and other components within the system are all transmitted using digital data and that these digital data are converted back to analog data as necessary. Without an analog-to-digital converter for the video and audio signals, these signals cannot be transmitted over the digital network.

Wakai does not specifically disclose that *said at least one paired analog audio, signal input and analog video signal input said video decoder, said analog-to-digital converter, said compressor, said network interface, and said digital data network being located in an automobile*. However, Wakai does suggest that the system can be readily

adapted for operation in environments other than aircraft, including but not limited to other transportation modes, e.g., bus among other things (21:60-64).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system taught by Wakai to operate in a vehicle (e.g., car, bus, minivan, etc.) in order to provide a fully-interactive and multiple-feature video on demand entertainment system to passengers (2:55-58; 1:40-50) for their entertainment on a trip.

Claim 2

Wakai discloses a built-in automobile *digital data system comprising the interface of claim 1* (see discussion in Claim 1), *wherein said digital data network is a fiber-optic network* (see at least 4:31-32; 6:33-34), *and said network interface converts said audiovisual data stream into an optical data stream before transmitting said optical data stream on said digital data network* (it is noted that this conversion is inherent to Wakai since the digital data network uses fiber optic cable, which requires that digital data be converted to optical data stream in order to be transmitted over the fiber optic cable).

Claim 3

The rejection of base claim 2 is incorporated. Wakai further discloses *wherein said at least one paired analog audio signal and analog video signal input is accessible for use as an external input by at least one passenger of said automobile* (see at least FIG. 1, "Ext A/V Input" to the "System Interface Unit" 118; 7:2-3).

Claim 4

The rejection of base claim 1 is incorporated. Wakai further

discloses *wherein said compressor uses an MPEG compression* (see at least FIG. 7, item 714).

Claim 5

The rejection of base claim 1 is incorporated. Wakai further discloses:

a second paired analog audio signal input and analog video signal input (see at least FIG. 1, items 120 – audio reproducer input -- and 122 – video reproducer unit).

wherein said network interface receives output from said first and second compressors, packetizes said first and second audiovisual data streams and transmits said first and second audiovisual data streams on said digital data network (see at least FIG. 1, items 118, 116, 138-140; it is noted that the digital data network is a ATM – asynchronous transfer mode – network, which encodes data traffic into small packets)

Wakai does not specifically disclose:

a second video decoder connected to said second video signal input for decoding and digitizing a second video signal;

a second analog-to-digital converter connected to said second audio signal input for digitizing a second audio signal.

However, the video decoder and digitizer and audio analog-to-digital converter are deemed inherent to Wakai as 4:42-45 and 8:3-8 show that communications between users and other components within the system are all transmitted using digital data and that these digital data are converted back to

analog data as necessary. Without an analog-to-digital converter for the video and audio signals, these signals cannot be transmitted over the digital network.

Wakai does not specifically disclose *a second compressor for receiving output from said second video decoder and said second analog-to-digital converter and combining and compressing said digitized second video signal and said digitized second audio signal into a second audiovisual data stream*. However, Official notice is taken that it is well known in the art to add expansion cards to an existing system via the backplane of the system (see Wakai, FIG. 15B, MPEG 1 Encoder Card) and that compressors (e.g., MPEG 1 card) are discrete components that can be designed as expansion card. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Wakai system to provide additional slots on the interface board 118 in FIG. 1 to accommodate additional compressor cards for the purpose of future expansion.

Wakai does not specifically disclose that *said second paired analog audio signal input and analog video signal input, said second video decoder, said second analog-to-digital converter. and said second compressor being located in an automobile*. However, Wakai does suggest that the system can be readily adapted for operation in environments other than aircraft, including but not limited to other transportation modes, e.g., bus among other things (21:60-64).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system taught by Wakai to operate in a vehicle (e.g., car, bus, minivan, etc.) in order to provide a fully-interactive and multiple-feature video on demand entertainment system to passengers (2:55-58; 1:40-50) for their entertainment on a trip.

Claim 7

Wakai discloses a *system for reproducing and transmitting audiovisual data from an optical disc comprising:*

an optical disc drive for reproducing audio or audiovisual data from an optical disc, wherein said optical disc drive outputs an analog video signal (see at least FIG. 1, 122 and 6:51-52; FIG. 15B, item 110, "CD Drive").

For the remaining features of Claim 7, see discussion in Claim 1.

Claim 8

The rejection of base claim 7 is incorporated. Since Claim 8 recites the same feature of Claim 2, the same rejection is thus applied.

Claim 9

The rejection of base claim 7 is incorporated. Wakai further Discloses *wherein said digital data network carries a plurality of audiovisual data streams in packets* (since Wakai's digital data network is an ATM – Asynchronous Transfer Mode – network, data traffic is encoded into small packets for transmission).

Claim 10

The rejection of base claim 7 is incorporated. Since Claim 10 recites the same feature of Claim 4, the same rejection is thus applied.

Claim 11

The rejection of base claim 7 is incorporated. Wakai further discloses *a micro-controller for receiving user commands for said optical disc drive via said data network and controlling said optical disc drive in accordance with said user commands* (see at least FIG. 15B, items 1104, 1108).

Claim 12

The rejection of base claim 7 is incorporated. Wakai does not specifically disclose *wherein said optical disc drive and said interface are enclosed in a common enclosure, said enclosure being installed in a vehicle*. FIG. 1 of Wakai shows that the optical disc drive (e.g., item 122) and the system interface unit 118 are not enclosed in a common enclosure. However, if Wakai's system is adapted to fit in an automobile (according to the suggestion at 21:60-64), there would be an incentive to house these two discrete components in a common enclosure because of space restriction. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Wakai's system designed for an airplane to work in an automobile by housing the optical disc drive in the same enclosure as the interface for practical purposes.

Claim 13

The rejection of base claim 7 is incorporated. Since Claim 13 recites the same features of Claim 5, the same rejection is thus applied:

Claim 14

The rejection of base Claim 7 and intervening Claim 13 is incorporated. Since Claim 14 discloses the same limitation of Claim 4, the same limitation is thus applied.

Claim 15

Wakai discloses *a system for transmitting audiovisual data from a digital video camera comprising:*

an IEEE 1394 port for receiving an IEEE 1394 bus connected to a digital video camera (see at least FIG. 1, item 126) such that a digital audiovisual signal transmitted via said bus from said camera is received through said port (see at least 18:46-49 in the context of 18:3-19:17);

Wakai further discloses the same features of claims 8, 11 and 7. The same rejections of Claims 8, 11 and 7 are thus applied.

Claim 16

The rejection of base claim 15 is incorporated. Since Claim 16 recites the same limitation of Claim 8, the same rejection is thus applied.

Claim 17

The rejection of base claim 15 is incorporated. Since Claim 17 recites the same limitation of Claim 9, the same rejection is thus applied.

Claim 18

The rejection of base claim 15 is incorporated. Since Claim 18 recites the same limitation of Claim 4, the same rejection is thus applied.

Claim 20

The rejection of base claim 15 is incorporated. Since Claim 20 recites the same limitation of Claim 5, the same rejection is thus applied.

Claim 21

The rejection of base Claim 15 and intervening Claim 20 is incorporated. Since Claim 21 discloses the same limitation of Claim 4, the same limitation is thus applied.

Claim 22

The rejection of base claim 15 is incorporated. Since Claim 22 recites the same limitations of Claims 13 and 7, the same rejections are thus applied.

Claim 23

The rejection of base Claim 15 and intervening Claim 22 is incorporated. Since Claim 23 recites an additional third group of components having similar functions to those of Claim 20 (second group), the same rejection is thus applied.

Claim 24

Since Claim 24 is an independent claim that recites a method of interfacing an analog audiovisual signal source with an in-vehicle digital data network, the method performing the same method steps of Claim 1, the same rejection is thus applied.

Claim 25

The rejection of base Claim 24 is incorporated. Since Claim 25 recites the same feature of Claim 2, the same rejection is thus applied.

Claim 26

The rejection of base Claim 24 is incorporated. Wakai further discloses *connecting at least one audiovisual output device to said data network for receiving and outputting said audiovisual data stream* (FIG. 1, items 120, 122 shown connected to System Interface Unit, 118, ATM Switch 116, Zone Units 1-N 138-140).

Claim 27

The rejection of base Claim 24 and intervening Claim 26 is incorporated. Wakai does not specifically disclose *wherein said connecting of at least audiovisual output device to said data network is performed in a vehicle in which said data network is installed*.

However, Wakai does suggest that the system can be readily adapted for operation in environments other than aircraft, including but not limited to other transportation modes, e.g., bus among other things (21:60-64).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system taught by Wakai to operate in a vehicle (e.g., car, bus, minivan, etc.) in order to provide a fully-interactive and multiple-feature video on demand entertainment system to passengers (2:55-58; 1:40-50) for their entertainment on a trip.

Claim 28

The rejection of base Claim 24 is incorporated. Since Claim 28 recites the same limitation of Claim 4, the same rejection is thus applied.

Claim 29

The rejection of base Claim 24 is incorporated. Since Claim 29 recites the same limitation of Claim 5, the same rejection is thus applied.

Claim 31

Wakai discloses a method of reproducing and transmitting audiovisual data from an optical disc comprising the method steps performed by the components recited in Claim 7. The same rejection is thus applied.

Wakai further discloses:

remotely controlling said optical disc drive by entering user commands which are transmitted to said optical disc drive via said network (see at least FIG. 15B, item 110, e.g., the console/keyboard).

Claim 32

The rejection of base claim 31 is incorporated. Since Claim 32 recites the same limitation of Claim 8, the same rejection is thus applied.

Claim 34

The rejection of base claim 31 is incorporated. Since Claim 34 recites the same limitation of Claim 4, the same rejection is thus applied.

Claim 36

The rejection of base claim 31 is incorporated. Since Claim 36 recites the same limitation of Claim 5, the same rejection is thus applied.

Claim 37

Since Claim 37 is an independent claim that recites the same features of Claim 15, the same rejection is thus applied.

Claim 38

The rejection of base claim 37 is incorporated. Since Claim 38 recites the same limitation of Claim 8, the same rejection is thus applied.

Claim 39

The rejection of base claim 37 is incorporated. further discloses *installing said digital data network in an automobile*.

Claim 40

The rejection of base claim 37 is incorporated. Since Claim 40 recites the same limitation of Claim 4, the same rejection is thus applied.

Claim 42

Since Claim 42 is an independent claim that recites a system for interfacing an analog audiovisual signal source with a digital data network comprising the means for performing the same method steps of independent Claim 31, the same rejection is thus applied.

Claim 44

The rejection of base claim 42 is incorporated. Since Claim 44 recites the same features of Claim 9, the same rejection is thus applied.

Claim 45

Since Claim 45 is an independent claim that recites a system for reproducing and transmitting audiovisual data from an optical disc comprising means for performing the same method steps of independent Claim 31, the same rejection is thus applied.

Claim 47

The rejection of base claim 45 is incorporated. Since Claim 47 recites the same features of Claim 9, the same rejection is thus applied.

Claim 48

Since Claim 48 is an independent claim that recites a system for transmitting audiovisual data from a digital video camera comprising means for performing the same method steps of independent Claim 37, the same rejection is thus applied.

Claim 49

Since Claim 49 is an independent claim that recites the combined features of Claims 1 and 5, the same rejection is thus applied.

Wakai does not specifically disclose:

an S-video input paired with a third analog audio signal input. However, Official notice is taken that cable carrying S-video signal, a definition of which available in Wikipedia and shown herein below, and associated connector are well known in the art to be inexpensive and widely used for DVD players connections. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use

S-video input in Wakai, as this would allow inexpensive and available connectivity of DVD players with the system interface unit.

Wakai further discloses:

a first multiplexer for receiving said first, second and S-video signals and providing a selected video signal to said first video decoder (see at least FIG. 7, item 712).

Wakai does not specifically disclose:

a second multiplexer for receiving said first, second, and third audio signals and providing a selected audio signal to said first analog-to-digital converter;

a third multiplexer for receiving said first, second, and S-video signals and providing a selected video signal to said second video decoder; and

a fourth multiplexer for receiving said first, second and third audio signals and providing a selected audio signal to said second analog-to-digital converter.

However, Official notice is taken that using multiplexer, a definition of which available in Wikipedia and shown herein below, is well known in the art to select one of many data-sources and output that source into a single channel. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to add a second, third and fourth multiplexers to Wakai. One of ordinary skill in the art would have been motivated to add more multiplexers to Wakai in order to make more inputs into the system interface available and to allow more flexibility in the routing of these input signals to appropriate decoders for processing.

Separate video, abbreviated S-Video and also known as Y/C (or erroneously, S-VHS and "super video") is an analog video signal that carries the video data as two separate signals (brightness and color), unlike composite video

which carries the entire set of signals in one signal line. S-Video, as most commonly implemented, carries high-bandwidth 480i or 576i resolution video, i.e. standard definition video. It does not carry audio on the same cable.

Due to the wide use of S-Video connections for DVD players, S-Video cables are fairly inexpensive compared to component or digital connector cables, and are routinely available in places where the higher-bandwidth cables are not.

A multiplexer or mux (*occasionally the term muldex is also found, for a combination multiplexer-demultiplexer*) is a device that selects one of many data-sources and outputs that source into a single channel.

A demultiplexer (or demux) is a device taking a single input that selects one of many data-output-lines and connects the single input to the selected output line. A muxtplexer is often used with a complimentary demultiplexer on the receiving end.

In electronics, multiplexers function as multiple-input, single-output switches. A multiplexer has multiple inputs and a selector that connects a specific input to the single output. The schematic symbol for a multiplexer is an isosceles trapezoid with the longer parallel side containing the input pins and the short parallel side containing the output pin. The schematic on the right shows a 2-to-1 multiplexer on the left and an equivalent switch on the right. The *se/wire* connects the desired input to the output.

In digital signal processing (DSP), the multiplexer takes several separate digital data streams and combines them together into one data stream of a higher data rate. This allows multiple data streams to be carried from one place to another over one physical link, which saves cost.

Claim 50

Since Claim 50 is an independent claim that recites a method of interfacing an analog audiovisual signal source with a digital data network, a method comprising of steps that are performed by the components recited in Claim 49, the same rejection is thus applied.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone number is (571) 272-3701. The examiner can normally be reached on Tuesday-Friday from 7:15 am to 5:35 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, John Miller can be reached at (571) 272-7353.

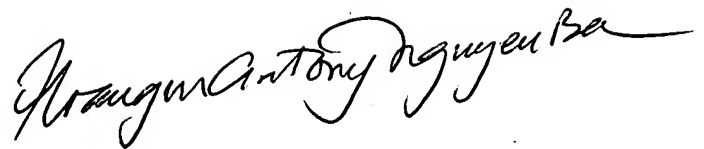
The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2600 Group receptionist (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access

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to the Private PAIR system, contact the Electronic Business Center (EBC) at
(866) 217-9197 (toll-free).

A handwritten signature in black ink, reading "Anthony Nguyen-Ba". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

ANTONY NGUYEN-BA
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100

January 9, 2007